

WE CLAIM

1. A system being connectable to a feed of digital data of an image series of frames captured at a capture frame rate for producing a plurality of digital data streams collectively containing said digital data of said image series at a lower rate, said system comprising:

a frame processing module having

an input port connected to said feed;

a processing device for file format conversion of frames of said feed;

a plurality of output ports for transmitting from said system a set of output streams; and

10 a processing module having

a first module for identifying a frame in said feed and for identifying an index associated with said frame;

a second module to split said image series into a plurality of component elements, to associate each element of said component elements with a subindex related to said index and to distribute said plurality of component elements as data amongst said plurality of output ports in a distribution pattern.

2. The system of claim 1 further comprising

a frame recorder for receiving said data in said plurality of output ports and constructing
a recombined image series of said image series from said data, said frame recorder
having

a plurality of input ports associated with said plurality of output ports;

a recording element associated with each input port of said plurality of input
ports;

an image reconstruction module to read data arriving from said plurality of input
ports in a manner governed by said distribution pattern, to extract component
elements and subindex information contained therein and to generate said
recombined image series utilising said component elements and subindex
information by controlling said recording element of said each input port to
selectively transfer said data arriving from said plurality of input ports to produce
said recombined image series; and

an output port for transmitting said recombined image series from said frame
recorder.

3. The system of claim 2 wherein

said frame processing module further comprises a storage device for said image series,
and

said processing module further comprises

a third module for directing said frames to said storage device while processing said image series and for providing said component element from said storage device to said second module when said second module is distributing said component element to said one port.

4. The system of claim 3 wherein said capture rate is forty-eight (48) frames per second, said lower rate is twenty-four (24) frames per second, said plurality of digital data streams are two data streams and said plurality of output ports comprise a first port and a second port.

5. The system of claim 4 wherein said frame recorder further comprises a module for generating an edit copy of said image series, said edit copy having a edit frame rate which is

10 lower than said capture rate.

6. The system of claim 5 wherein

said processing module device further comprises:

a first buffer associated with said input port for storing said frames; and

a second buffer associated with said plurality of output ports;

and

said frames are moved from said first buffer to said second buffer as they are fully received by said frame processing module.

7. The system of claim 6 wherein said distribution pattern comprises providing one frame of said image series to said first port and providing the next frame of said image series to said second port.

8. The system of claim 6 wherein said distribution pattern comprises providing one line a frame of said image series to said first port and providing the next line of said frame to said second port.

9. A method of processing an image series of frames captured at a capture frame rate comprising steps of:

- a) identifying a frame in said image frame and an index associated with said frame;
- b) extracting a component element from said frame;
- c) generating a subindex related to said index for said component element;
- d) distributing said component element and said subindex to a frame recorder in a data stream to one output port of a plurality of output ports according to a distribution pattern, each of said plurality of output ports transmitting at a data rate lower than said capture frame rate;
- e) at said frame recorder, receiving all data streams from said plurality of output ports and constructing a reconstructed image series representing said image series utilizing said all data streams and storing said reconstructed image in a database.

10. The method of processing an image series of frames as claimed in claim 9, said method further comprising

- f) generating an edit copy of said image series from said reconstructed image produced by accessing said reconstructed image and dropping one component element from said image series from said edit copy at a periodic interval, said edit copy having an edit frame rate which is lower than said capture frame rate.

11. The method of processing an image series of frames as claimed in claim 10, wherein in said step f) said periodic interval comprises dropping every second component element from said image series.

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12. The method of processing an image series of frames as claimed in claim 9, said method further comprising

- f) generating an archive copy of said image series by accessing said reconstructed image and providing each frame of said reconstructed image to said archive copy, said archive copy having an archive copy frame rate which is lower than said capture frame rate.

13. The method of processing an image series of frames as claimed in claim 12, said method further comprising

- g) editing said archive copy to create a presentation master copy of said image series, said presentation master copy having a presentation frame rate which is equivalent to said archive copy frame rate;

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- h) creating a plurality of duplication copies of said presentation master copy, each of said plurality of duplication copies having a duplication frame rate which is equivalent to said presentation frame rate; and
- i) displaying one of said plurality of presentation master copies at a theatre at said capture frame rate.

14. The method of processing an image series of frames as claimed in claim 13, wherein in said step c) said subindex is a temporal equivalent identifier for said component element.

15. The method of processing an image series of frames as claimed in claim 14, wherein said archive copy is provided with an edit decision list representing a translated edit points relating to
10 said image series.

16. The method of processing an image series of frames as claimed in claim 15, wherein said presentation master copy is provided with an edit decision list representing edit points relating to said image series.

17. The method of processing an image series of frames as claimed in claim 16, wherein in said step g) said editing comprises editing said archive copy to introduce editing changes relating to one of editorial, compositing and colour correction edits.

18. The method of processing an image series of frames as claimed in claim 17, wherein in said step g) said plurality of duplication copies comprise digitized images of frames.

19. The method of processing an image series of frames as claimed in claim 18 wherein said component element is selected from said frame entirely and a field of said frame.

20. The method of processing an image series of frames as claimed in claim 19, wherein in said capture frame rate is 48 fps, said edit frame rate is 24 fps, said archive copy frame rate is 24 fps and said duplication frame rate is 24 fps.

21. The method of processing an image series of frames as claimed in claim 20, wherein said edit decision list for said edit copy reflects an edit point for every other frame of said image series for said presentation copy.